

## **REMARKS**

Claims 7-10, 11 and 13-30 were pending and under consideration.

Claims 1-6, 8-9 and 12-13 were canceled previously.

In the Office Action of February 5, 2004, claims 7, 11, 15, and 21 were rejected and claims 10, 14, 16-20, and 22-30 were objected to.

In response, claims 7, 11, 15, and 21 have been amended.

Claims 7, 11, 15 and 21 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse this rejection.

Claims 7, 11, 15 and 21 recite "M includes at least one 3d transition metal selected from the group consisting of Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu and Zn." Applicants assert that no new matter has been added. While the specification does not list all the elements in the 3d transition metal group, it is commonly known in the relevant art that the 3d transition metal group includes elements such as Si, Ti, V, Cr, Mn, Fe, Co, Ni, Cu and Zn. Applicants herein attach a periodic table for reference. (See attached periodic table).

Claims 7, 11, 15 and 21 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

In response, claims 7, 11, 15 and 21 have been rewritten to include process steps recited for making a battery and to include proper Markush language per Examiner's suggestion.

Claims 10, 14, 16-17, 19-20, 22-23, 25-27 and 29 all depend directly from claims 7, 11, 15, and 21 and are therefore allowable for at least the same reason that claims 7, 11, 15, and 21 are allowable.

Applicants respectfully submit these rejections have been overcome and request that they be withdrawn.

In view of the foregoing, it is submitted that the pending claims 7-10, 11 and 13-30 are patentable and that the application is in condition for allowance. Notice to that effect is respectfully requested.

Respectfully submitted,

SONNENSCHN NATH & ROSENTHAL, LLP

 (Reg. No. 32,919)  
David R. Metzger

SONNENSCHN NATH & ROSENTHAL LLP  
CUSTOMER ACCT. NO. 26263

P.O. Box 061080 - Wacker Drive Station

Chicago, Illinois 60606

Telephone (312) 876-2578

Attorneys for Applicant

SONNENSCHN NATH & ROSENTHAL, LLP

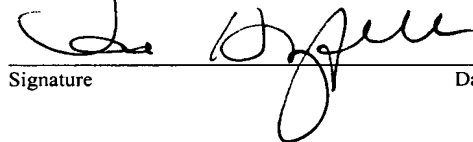
P.O. Box #061080

Wacker Drive Station-Sears Tower

Chicago, Illinois 60606-1080

(312)876-2578

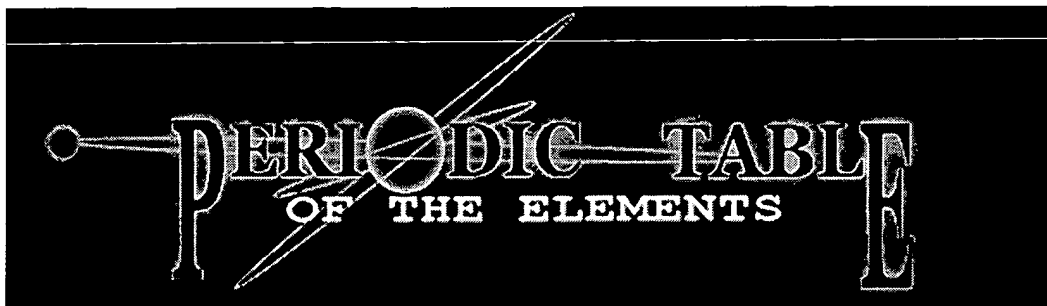
I hereby certify that this document and any being referred to as attached or enclosed is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop ~~Non-Fee~~ Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 5, 2004.

 5/5/04  
Signature Date

MQT/11717893v1



Los Alamos National Laboratory's Chemistry Division Presents:



A Resource for Elementary, Middle School, and High School Students



Group\*\*

Period																	18	
	1																	VIIIA
	1A																	8A
1	1 <u>H</u> 1.008	2 IIA 2A											13 IIIA 3A	14 IVA 4A	15 VA 5A	16 VIA 6A	17 VIIA 7A	2 <u>He</u> 4.003
2	3 <u>Li</u> 6.941	4 <u>Be</u> 9.012											5 <u>B</u> 10.81	6 <u>C</u> 12.01	7 <u>N</u> 14.01	8 <u>O</u> 16.00	9 <u>F</u> 19.00	10 <u>Ne</u> 20.18
3	11 <u>Na</u> 22.99	12 <u>Mg</u> 24.31	3 IIIB 3B	4 IVB 4B	5 VB 5B	6 VIB 6B	7 VIIB 7B	8 ----- VIII -----	9 ----- VIII -----	10 ----- VIII -----	11 IB 1B	12 IIB 2B	13 <u>Al</u> 26.98	14 <u>Si</u> 28.09	15 <u>P</u> 30.97	16 <u>S</u> 32.07	17 <u>Cl</u> 35.45	18 <u>Ar</u> 39.95
4	19 <u>K</u> 39.10	20 <u>Ca</u> 40.08	21 <u>Sc</u> 44.96	22 <u>Ti</u> 47.88	23 <u>V</u> 50.94	24 <u>Cr</u> 52.00	25 <u>Mn</u> 54.94	26 <u>Fe</u> 55.85	27 <u>Co</u> 58.93	28 <u>Ni</u> 58.69	29 <u>Cu</u> 63.55	30 <u>Zn</u> 65.39	31 <u>Ga</u> 69.72	32 <u>Ge</u> 72.59	33 <u>As</u> 74.92	34 <u>Se</u> 78.96	35 <u>Br</u> 79.90	36 <u>Kr</u> 83.80
5	37 <u>Rb</u> 85.47	38 <u>Sr</u> 87.62	39 <u>Y</u> 88.91	40 <u>Zr</u> 91.22	41 <u>Nb</u> 92.91	42 <u>Mo</u> 95.94	43 <u>Tc</u> (98)	44 <u>Ru</u> 101.1	45 <u>Rh</u> 102.9	46 <u>Pd</u> 106.4	47 <u>Ag</u> 107.9	48 <u>Cd</u> 112.4	49 <u>In</u> 114.8	50 <u>Sn</u> 118.7	51 <u>Sb</u> 121.8	52 <u>Te</u> 127.6	53 <u>I</u> 126.9	54 <u>Xe</u> 131.3
6	55 <u>Cs</u> 132.9	56 <u>Ba</u> 137.3	57 <u>La</u> *138.9	72 <u>Hf</u> 178.5	73 <u>Ta</u> 180.9	74 <u>W</u> 183.9	75 <u>Re</u> 186.2	76 <u>Os</u> 190.2	77 <u>Ir</u> 190.2	78 <u>Pt</u> 195.1	79 <u>Au</u> 197.0	80 <u>Hg</u> 200.5	81 <u>Tl</u> 204.4	82 <u>Pb</u> 207.2	83 <u>Bi</u> 209.0	84 <u>Po</u> (210)	85 <u>At</u> (210)	86 <u>Rn</u> (222)
7	87 <u>Fr</u> (223)	88 <u>Ra</u> (226)	89 <u>Ac</u> ~(227)	104 <u>Rf</u> (257)	105 <u>Db</u> (260)	106 <u>Sg</u> (263)	107 <u>Bh</u> (262)	108 <u>Hs</u> (265)	109 <u>Mt</u> (266)	110 <u>Ds</u> (271)	111 <u>Uuu</u> (272)	112 <u>Uub</u> (277)	114 <u>Uuq</u> (296)	116 <u>Uuh</u> (298)	118 <u>Uuo</u> (?)			

Lanthanide Series*	58	59	60	61	62	63	64	65	66	67	68	69	70	71
	<b>Ce</b>	<b>Pr</b>	<b>Nd</b>	<b>Pm</b>	<b>Sm</b>	<b>Eu</b>	<b>Gd</b>	<b>Tb</b>	<b>Dy</b>	<b>Ho</b>	<b>Er</b>	<b>Tm</b>	<b>Yb</b>	<b>Lu</b>
	140.1	140.9	144.2	(147)	150.4	152.0	157.3	158.9	162.5	164.9	167.3	168.9	173.0	175.0
Actinide Series~	90	91	92	93	94	95	96	97	98	99	100	101	102	103
	<b>Th</b>	<b>Pa</b>	<b>U</b>	<b>Np</b>	<b>Pu</b>	<b>Am</b>	<b>Cm</b>	<b>Bk</b>	<b>Cf</b>	<b>Es</b>	<b>Fm</b>	<b>Md</b>	<b>No</b>	<b>Lr</b>
	232.0	(231)	(238)	(237)	(242)	(243)	(247)	(247)	(249)	(254)	(253)	(256)	(254)	(257)

\*\* Groups are noted by 3 notation conventions.

[The Old Site](#)

[Downloads](#)

[Get Adobe Acrobat Reader for free](#)

Questions - Comments - Feedback

Send an email to [ask\\_a\\_chemist@lanl.gov](mailto:ask_a_chemist@lanl.gov)



Last Updated: 12/11/2003

[about this resource](#)

[ LANL | Chemistry Division | DOE | Disclaimer ]